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Reel # 490

Savin Kova, K.V.

AUTHORS: Nikolenko, L. Nl, Koptuyug, V.A. ., SOV/156-58-1-32/46  
Savinkova, Ye. V.

TITLE: On the Interaction of Benzyl Amine With Hydrogen Sulfide  
(O vzaimodeystvii benzilamina s serovodorodom)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya  
tekhnologiya, 1958, Nr 1, pp. 133 - 134 (USSR)

ABSTRACT: From an analogy with the reaction of the thiophenols with amines (Refs 1,2), the formation of mercaptan could be expected in connection with the interaction of the latter with hydrogen sulfide. It has turned out, however that a peculiar S-alkylation takes place which leads to the formation of benzyl mercaptan. In the case of an 18 hours' heating of a mixture of benzyl amine, sodium sulfide and HCl at from 240 to 245°, the yield of benzyl mercaptan amounted to 38,8% moreover, 4,2% dibenzyl-disulfide were isolated. The mechanism of the interaction of hydrogen sulfide with benzyl amine is obviously analogous to the mechanism of alkylation of the thiophenols by amines (Ref 2). An experimental part follows.

Card 1/2

On the Interaction of Benzyl Amine With  
Hydrogen Sulfide

SOV/156-58-1-32/46

In a footnote the author corrects the data given in his report (Ref 1): The substance with a melting point of from 50 to 51° - which is described there - is not a methyl- $\beta$ -naphthyl sulfide, but an acetyl derivative of the N-methyl- $\beta$ -naphthyl amine. There are 6 references, 3 of which are Soviet.

ASSOCIATION: Kafedra tekhnologii organicheskikh krasiteley Moskovskogo khimiko-tekhnologicheskogo instituta im. D. I. Mendeleyeva (Chair of the Technology of Organic Dyes at the Moscow Chemical and Technological Institute imeni D. I. Mendelejev)

SUBMITTED: September 14, 1957

Card 2/2

SAVINO, A.V., inzh.

Apparatus for tuning the automatic safety devices of turbines.

Energetik 10 no.7:13-14 JI '62.

(MIRA 15:7)

(Turbines--Safety appliances) (Automatic control)

SAVINOV, A.

Hard-working. Prom.koop. 12 no.12:5 D '58. (MIRA 12:2)

1. Zamestitel' predsedatelya pravleniya arteli invalidov "Pobeda"  
po orgmassovoy rabote i kadram, g Vladimir.  
(Vladimir--Vocational rehabilitation)

1. SAVINOV, A.
2. USSR (600)
4. Horses
7. The Agoshkovs as horsebreeders, Konevodstvo 23 no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

SAVINOV, A.I., inzhener.

Applying the analytical method in determining the class of complexity of machinery equipment. Vest.mash.34 no.12:88-89 D'54.  
(MLRA 8:2)

1. Glavnyy konstruktor Leningradskogo filiala Gipromez.  
(Machinery industry)

S/137/62/000/001/007/237  
A060/A101

AUTHOR: Savinov, A.I.

TITLE: From the practice of specialization and cooperation in the production of spare parts and replacement articles in the metallurgical industry of the Chinese People's Republic

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 8, abstract 1V59 ("Tr. Leningr. inzh.-ekon. in-ta", 1960, no. 31, 133 - 142)

TEXT: The methodological foundations of the plan were worked out in large measure on the basis of the experience in the USSR. However the method and approach to the solution of the fundamental problem are original and are of practical value for USSR conditions; 1) division of enterprises into groups depending on the volume of basic production; 2) determination of the economically expedient (normal) scales for the repair shops for each group of metallurgical enterprises; 3) the division of metallurgical enterprises by regions - in the spheres of influence of the leading enterprises of the metallurgical industry and heavy-machinery construction, etc.

[Abstracter's note: Complete translation]

N. Yudina

Card 1/1

SAVINOV, A.P.; TSYPKIN, L.B.

Studies on stable cultures of the heart Cynomolgus monkeys in  
rat experiments. Vop. onk. 6 no.3:27-34 Mr '60. (MIRA 14:2)  
(HEART--TUMORS) (TISSUE--CULTURE)

FROLOVA, M.P.; SAVINOV, A.P.

Histopathology of experimental infection in rodents caused by  
Karaganda strains AB (type 4 of poliomyelitis virus). Vop.virus.  
5 no.3:309-315 My-Je '60. (MIRA 13:9)

1. Laboratoriya patogistologii Instituta po izuchenyu poliomyelita  
AMN SSSR, Moskva.

(POLIOMYELITIS)

SAVINOV, A.P.; TSYPKIN, L.B.

Results of a morphological study of the stability of cultures of  
Cynomolgus monkey heart cells in vivo. Vop.virus. 5 no.3:367-372  
My-Je '60. (MIRA 13:9)

1. Institut po izucheniyu poliomiyeleta AMN SSSR, Moskva.  
(NEOPLASMS) (VIRUSES)

SAVINOV, A.P.

Mechanism of the appearance of cerebral hemorrhage in hypertension and atherosclerosis. [with summary in French]. Zhur, nevr. i psikh. 28 no.9:1032-1041 '58 (MIRA 11:11)

1. Kafedra patologicheskoy anatomii (zav. - prof. I.V. Davydovskiy) II Moskovskogo meditsinskogo instituta:
  - (HYPERTENSION, compl. cerebral hemorrh., pathol (Rus))
  - (ARTERIOSCLEROSIS, compl. same (Rus))
  - (CEREBRAL HEMORRHAGE, etiol. & pathogen. arteriosclerosis & hypertension, pathol. (Rus))

CHUMAKOVA, M.Ya.; VASIL'YEV, Yu.M.; SAVINOV, A.P.; AGOL, V.I.;  
TSYPKIN, L.B.

Strain of malignant cells obtained through the prolonged cultivation in vitro of normal kidney tissue from mice of the A/SN line. Vop.onk. 8 no.8:51-57 '62. (MIRA 15:9)

1. Iz Instituta po izucheniyu poliomeleta i virusnykh entsefalitov (dir. - deystv. chl. AMN SSSR, prof. M.P. Chumakov) i Instituta eksperimental'noy i klinicheskoy onkologii (dir. - deystv. chl. AMN SSSR, prof. N.N. Blokhin) Akademii meditsinskikh nauk SSSR.  
(CANCER) (TISSUE CULTURE) (KIDNEYS)

ROBINZON, I.A.; TYUFANOV, A.V.; SHEFFEL', M.A.; SAVINOV, A.P.; FROLOVA,  
M.P.; YUROVETSKAYA, A.I.

Morphological control of the safety of poliomyelitis vaccine.  
Vest. AMN SSSR 14 no.10:29-34 '59. (MIRA 13:6)

1. Institut po izucheniyu poliomielita AMN SSSR.  
(POLIOMYELITIS)

SAVINOV, A.P.; TSYPKIN, L.B.

Morphological study on subcutaneous implants of stable cultures of monkey heart. Vop.onk. 5 no.9:319-325 '59. (MIRA 12:12)

1. Iz laboratorii patologicheskoy gistologii (zav. - dots. I.A. Robinson, konsul'tant po teme - chlen-korrespondent AMN SSSR prof. L.M. Shabad) Instituta po izucheniya poliomielifita AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. M.P. Chunakov). Adres avtorov: Moskva, 118, 8-ya ul., Sokolinoy gory, d.15, korp. 2. Institut po izucheniya poliomielifita AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. M.P. Chumakov). Adres avtorov: Moskva, 118, 8-ya ul. Sokolinoy gory, d.15, korp. 2. Institut po izucheniya poliomielifita AMN SSSR.

(HEART)

(NEOPLASMS exper.)

ROBINZON, I.A.; FROLOVA, M.P.; SAVINOV, A.P.; SHEFTEL', M.A.

Histopathology of experimental infections induced by infections with enteric neurotropic viruses. Zhur.nerv.i psikh. 59 no.7:769-776 '59. (MIRA 12:11)

1. Laboratoriya patogistologii (zav. - dotsent I.A. Robinzon) Instituta po izucheniyu poliomyelita AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. M.P. Chumakov).

(COXSACKIE VIRUSES, infet.  
exper. infect. with A7 strain (Rus))

FROLOVA, M.P.; SAVINOV, A.P.

Etiology of poliomyelitislike diseases caused by Coxsackie viruses; experimental morphological study. Zh. nevropat. psikhiat. Korsakov 63 no.3:330-338 '63 (MIRA 17:1)

1. Laboratoriya patogistologii (zav. - dotsent I.A.Robinzon)  
Instituta poliomiyelita i virusnykh entsefalitov (dir. - prof.  
M.P.Chumakov) AMN SSSR, Moskva.

POGODINA, V.V.; SAVINOV, A.P.

Variation in the pathogenicity of viruses of the tick-borne encephalitis complex for different animal species I. experimental infection of mice and hamsters. Acta virol. 8 no.5:424-434 S '64.

1. Institute of Poliomyelitis and Viral Encephalitides, U.S.S.R. Academy of Medical Sciences, Moscow.

SAVINOV, A.V.

The reason why I have no students lagging behind in their work.  
Est. v shkole no.4:79-82 J1-Ag '54. (MIRA 7:8)

1. Uchitel' Ponazyrevskoy sredney shkoly no.1 Ponazyrevskogo  
rayona Kostromskoy oblasti.  
(Biology--Study and teaching)

SAVINOV, A.V.

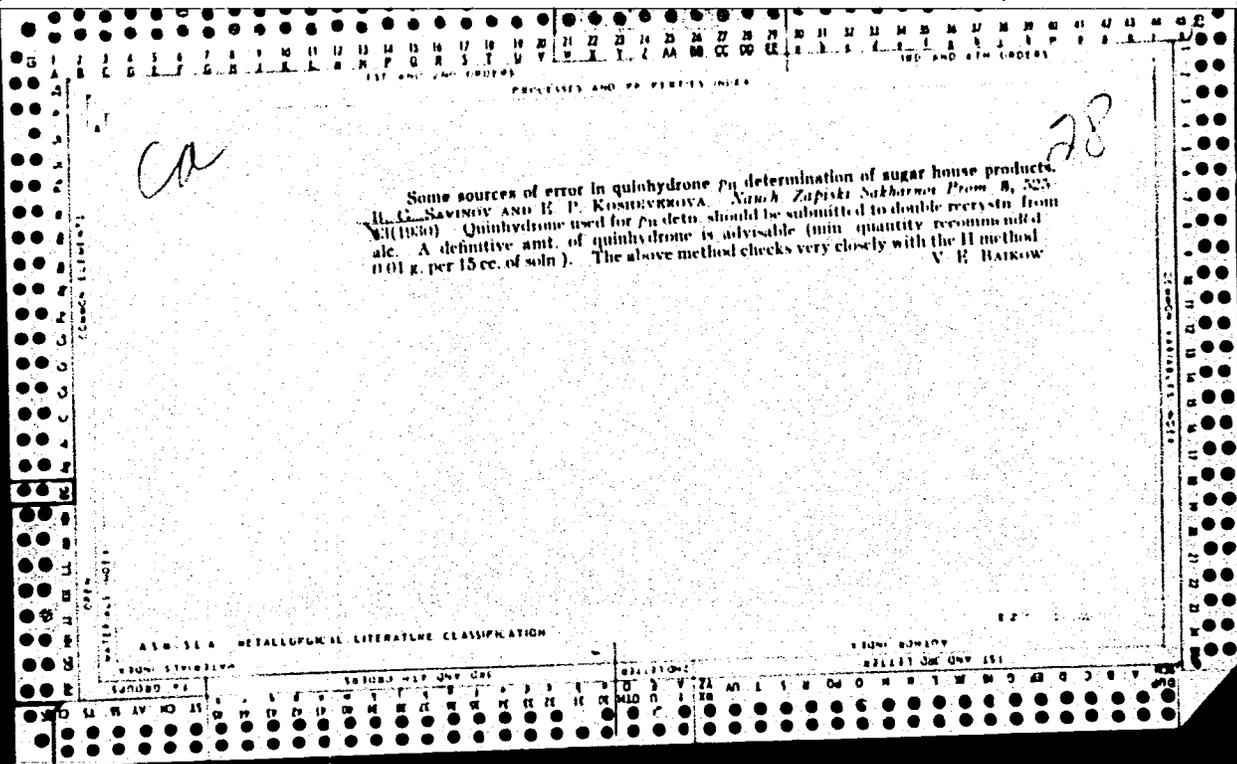
Heating the lubricating oil before starting turbocompressors.  
Energetik 4 no.9:10-11 S '56. (MLRA 9:10)  
(Compressors) (Turbomachines)

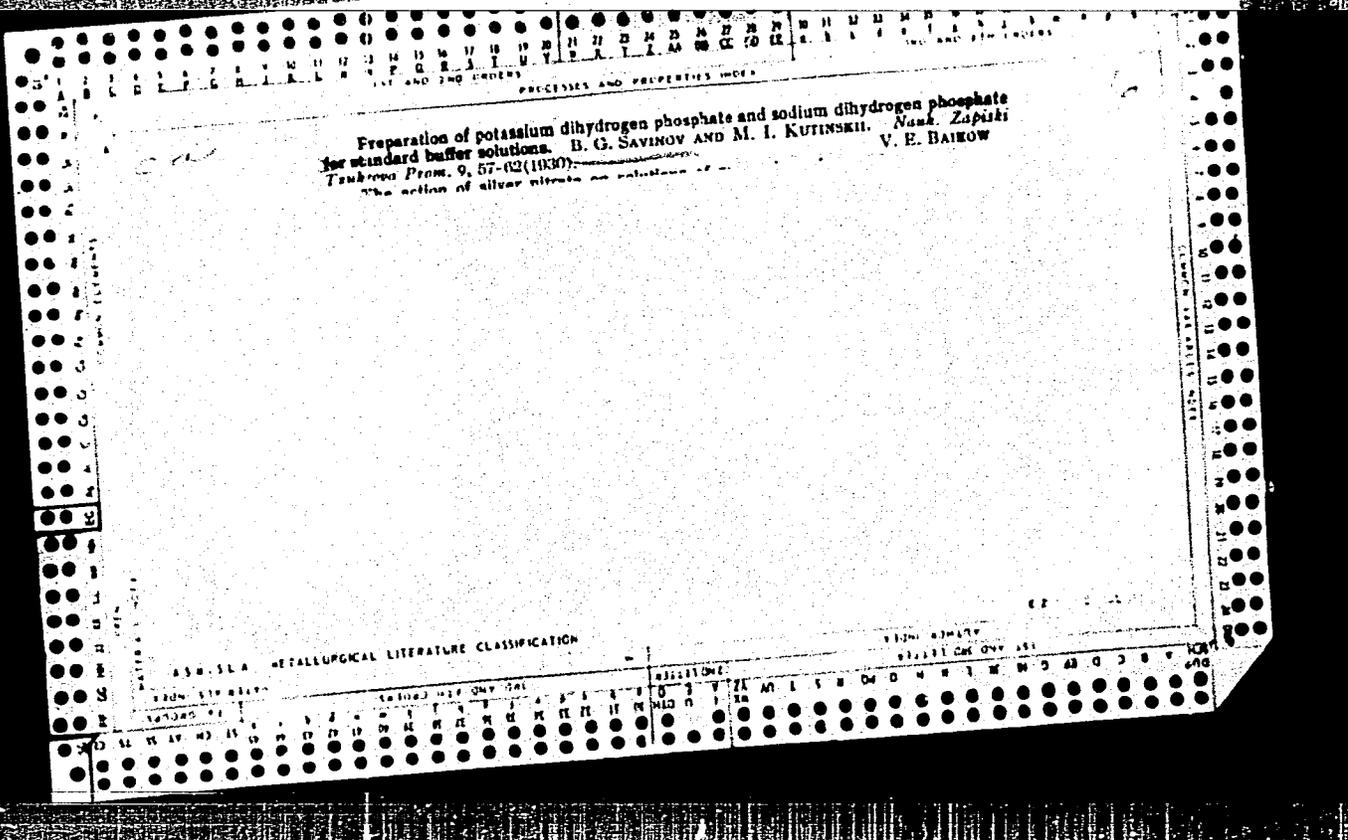
SAVINOV, A.V., inzh.

Conical feeler gage for measuring the diameters of elevator jets.  
Energetik 10 no.2:17 F '62. (MIRA 15:2)  
(Heating plants--Maintenance and repair)

SAVINOV, B., prof., doktor tekhn.nauk

Uses of an "invisible one." Znan. ta pratsia no.3:4-6 Mr '63.  
(MIRA 16:10)





SAVINOV, B. G.

SAVINOV, B. G. Nitrogen compounds; calculation and preparation Khar'kov, Gos. nauch. tekhn. izd-vo Ukrainy, 1933. 70 p.

SAVINOV, Boris Grigor'evich, 1903

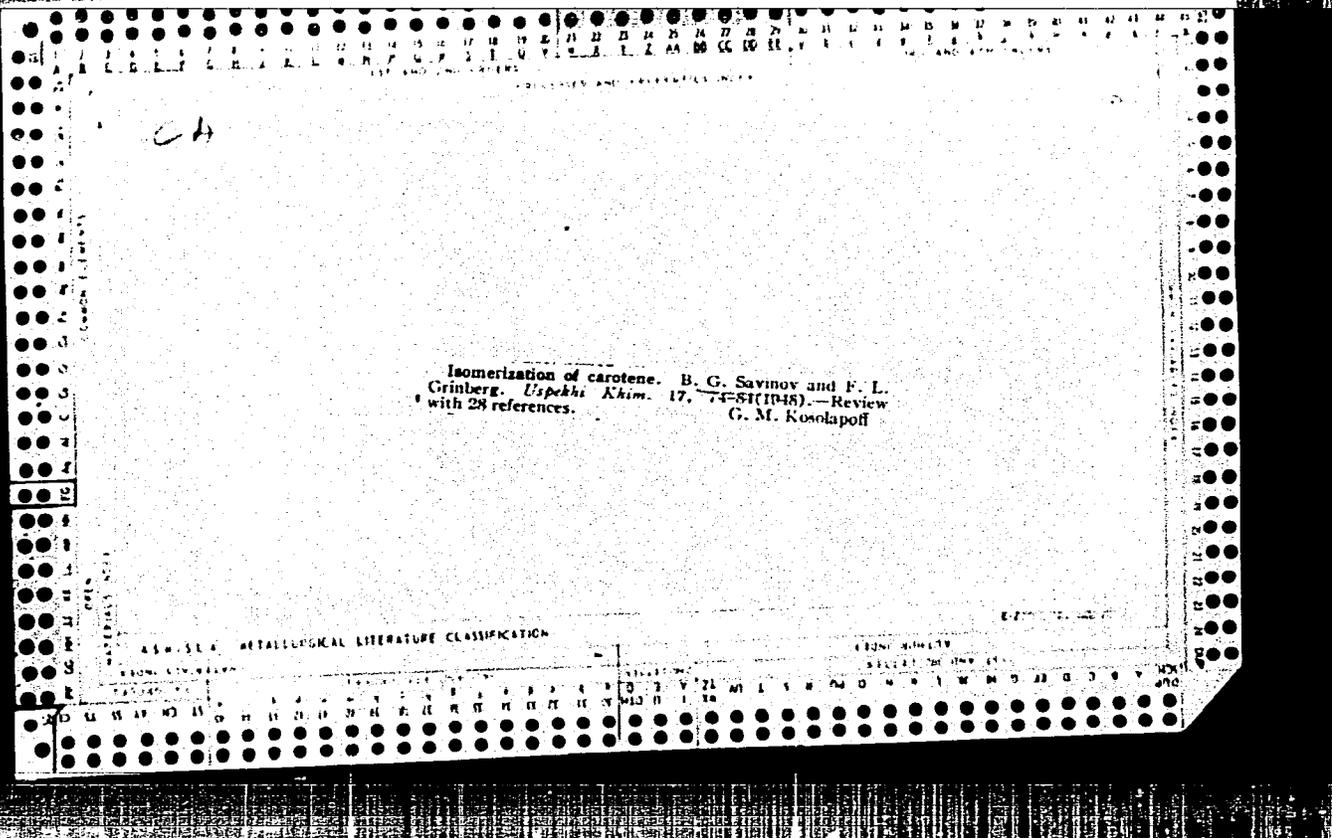
CAROTIN (Provitamin A) and how to obtain its preparations Kiev; Izd-vo Akade-  
mii nauk Ukr. SSR, 1948. 229 p. (54-22246)

UK898.C3533

SAVINOV, B. G.

Lushchevskaya, C. M. and Savinov, B. G. "On the optimal conditions in the use of green plants for the separation of carotin", (In index second author is B. G. Savinov), Ukr. Khim. zhurnal, 1948, Issue 1, p. 89-95, - Bibliog: 17 items.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).



SAVINOV, B. G.

Savinov, B. G. "The stability of carotene in organic solvents", Ukr. khim. zhurnal, Vol. XIV, Issue 2, 1949, p. 93-100, - Bibliog: 11 items.

SO: U-4392, 19 August 53. (Petropolis Zhurnal 'nykh Statey, No 21, 1949).

SAVINOV, B. G.

Savinov, B. G. "The use of pectinase preparations in separating out chromoplast pigments", Ukr. khim zhurnal, Vol XIV, Issue 2, 1949, p. 101-106, -Bibliog: 9 items.

SO: U- 4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No 21, 1949).

SAVINOV, B. G.

Savinov, B. G. and Grinberg, F. L. "Selection and activation of absorbents for the chromatographic separation of the isomers of carotin and its oxidation products," Ukr. khim. zhurnal, Vol XV, Issue 1, 1949, p. 41-52,-Bibliog: p. 52

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykhi Statey, No. 26, 1949)

~~SECRET~~  
SAVINOV, B. G.

Chemical Abst.  
Vol. 48 No. 6  
Mar. 25, 1954  
Organic Chemistry

Solubility of carotene in organic solvents. A. A. Mikhailovskii and B. G. Savinov. *Dokl. Akad. Nauk. SSSR* 15: 235-9; (1949) *Chem. Abstr.* 43: 5128. Carotene is most sol. in CS<sub>2</sub>, CHCl<sub>3</sub>, and CCl<sub>4</sub>; least in Me<sub>2</sub>CO and AcOH. with C<sub>6</sub>H<sub>6</sub>, MePh, xylene, (CH<sub>2</sub>Cl)<sub>2</sub>, petri ether, Et<sub>2</sub>O, and pyridine giving intermediate values. Sol. values at temps. in the range 5-50° are given. The following typical results at 25° in terms of  $N \times 10^{-4}$  are given: CS<sub>2</sub> 12.85; CHCl<sub>3</sub> 14.68; CCl<sub>4</sub> 11.59; C<sub>6</sub>H<sub>6</sub> 3.64; MePh 3.64; xylene 3.04; (CH<sub>2</sub>Cl)<sub>2</sub> 2.18; pyridine 0.739; Et<sub>2</sub>O 0.0849; Me<sub>2</sub>CO 0.04; and AcOH 0.024.  
G. M. Kosolapoff

SAVINOV, E. H.

Science - Congresses

Session of the Department of Physico-Mathematical and Chemical Sciences of the Academy of Sciences of the Ukrainian S.S.R. Visnyk AN URSR 21, No. 7, 1949.

Monthly List of Russian Accessions, Library of Congress  
June 1953. UNCL.

SAVINOV, B. G.

Chemical Abstracts  
Vol. 48 No. 5  
October 10, 1954  
Journal of Physical Chemistry

Some instances of the application of the chromatographic method to studies of fat-soluble vitamins. B. G. Savinov. *Issledovaniya v Oblasli Khromatog., Trudy Vsesoyuz. Soveshchaniya Khromatog., Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1950, 200-7 (Pub. 1952); cf. C.A. 44, 11032c. Chromatography on  $MgSO_4$  of the reaction products of bromination of carotene with *N*-bromosuccinimide showed very readily the presence of unreacted  $\alpha$ - and  $\beta$ -carotenes, along with a brown-yellow zone of the reaction product, which was very strongly retained by various adsorbents, of which  $MgSO_4$  was most satisfactory for elution of the product by soln. of the mechanically sepd. zone with  $H_2O$ . Products of catalytic oxidation of carotene can be sepd. chromatographically on  $Al_2O_3$  (C.A. 44, 10059a). Chromatography of carotene specimens subjected to the action of alc. KOH is best done on  $Ca(OH)_2$  dried at 400-500°; under mild treatment with alkali the di-*cis*-isomers of  $\alpha$ - and  $\beta$ -carotene form first: neo- $\beta$ -carotene B (absorption max. 475 and 445  $m\mu$ ) and neo- $\alpha$ -carotene B (466 and 437  $m\mu$ ). Alkali treatment at 50-100° gives smaller amts. of further degradation products which deposit above the former substances; the new materials are the mono-*cis*-isomers: neo- $\beta$ -carotene U (absorption max. 481 and 450  $m\mu$ ) and neo- $\alpha$ -carotene U (471 and 442  $m\mu$ ). Sepn. of carotene from natural products present in sunflower petals is readily done after extn. with  $Me_2CO$ -petr. ether and sapon. with alc. KOH, followed by chromatography on  $MgO$  (*Ukrain. Khim. Zhur.* 16, 310(1950)). Vitamin E detn. in plant products can be made by passage of the ext. through specimens of diatomite which retains chlorophyll, carotene, and carotenoids, and does not retain vitamin E; the filtrate can be analyzed by usual chem. methods. G. M. K.

CA

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Solubility of carotene in vegetable oils. A. A. Mikhalovna and H. G. Savinov (Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Khim. Zhur.* 16, 183-7(1950); cf. *ibid.* 15, 285(1949).—Solubilities of carotene in sunflower, cottonseed, olive, arachide, and tung oils, as well as in margarine and synthetic Et laurate were detd. In spite of variation in structures of the oils the solubilities were comparable at the same temps.: at 25°, 0.2%; at 45° 0.3%; and at 60° 0.5%. Carotene forms supersatd. solns. in oils readily, thus making it possible to prep. rather stable formulations with higher concns. of carotene. G. M. Kowlanoff

SAVINOV, B. G.

③  
Chromatographic study of the primary products of the catalytic oxidation and isomerization of carotene. B. G. Savinov and F. I. Grinberg (Inst. Org. Chem. Acad. Sci. Ukr. S.S.R.). *Ukrain. Khim. Zhur.* 16, 358-60 (1950) (in Russian); cf. 16, 57 (1950).—Carotene treated with O at 40° in C<sub>2</sub>H<sub>4</sub> or sunflower oil yields products which form a range of colored zones after adsorption on Al<sub>2</sub>O<sub>3</sub>; these include stereoisomers of carotene and its oxides and aldehydes formed by opening of one of the rings. These products are either devoid of biol. activity or possess it to a much smaller degree than carotene. The probably detected products are: neo-β-carotenes (I, V, B, D), and E, β-carotene diepoxide, β-carotene monoepoxide, mutachrome (isomeride of the epoxide), aurochrome, β-hydroxycarotene, β-apo-2-carotenal and β-apo-4-carotenal. Cu accelerates the oxidation.  
G. M. Kosolapoff

SAVINOV, B. G.

Chemical Abst.  
Vol. 48 NO. 6  
Mar. 25, 1954  
Biological Chemistry

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g*

Method of determining vitamin E in green parts of plants  
B. G. Savinov and G. M. Lushchevskaya. *Ukrain. Khim.  
Zhur.* 16, 370-82 (1950).—Crush 2-3 g. fresh green plant  
material and ext. with 15-25 ml. EtOH and then with 15-25  
ml. benzene. Add 1.5-2.5 ml. 50% aq. KOH and shake  
20 min. to allow sapon. Add H<sub>2</sub>O, discard the aq. layer  
and filter the benzene layer through anhyd. Na<sub>2</sub>SO<sub>4</sub>. Det.  
the content of carotenoids from the yellow color in the ben-  
zene layer. Evap. the benzene by gentle heating and dis-  
solve the residue by refluxing with 5 ml. abs. EtOH.  
Add 1 ml. HNO<sub>3</sub> and develop the rose color by refluxing  
exactly 3 min. Det. the extinction coeff. at 485 m $\mu$  and  
read the concn. of  $\alpha$ -tocopherol from a standard curve. The  
correction for the content of carotenoids amts. to 2-4 times  
the content of  $\alpha$ -tocopherol. Vitamin E contents in p.p.m.  
of dry wt. in green parts were: *Trifolium* sp., 277; *Artemisia*  
sp., 275; *Castanea sativa*, 264; *Acer* sp., 248; *Polygonum*  
*aviculare*, 207; *Echinochloa crus-galli*, 219; *Poa* sp., 217;  
*Berberis vulgaris*, 213; *Potentilla anserina*, 198; and *Malva*  
sp., 183.  
Ronald G. Menzel.

*RX*

1. SAVINOV, B.G.
2. USSR (600)
4. Chemistry - Societies
7. Kiev department of the All-Union D.I. Mendeleev Chemical Society, Ukr.khim.zhur.  
16 no. 5, 1950

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

SAVINOV B.G.

Stability of carotens to alkali. A. A. Mikhaylovina and B. O. Savinov. *Ukrain. Khim. Zhur.* 17, 488-501 (1961) [Ukr. Russian]. Treatment of  $\alpha$ - or  $\beta$ -carotene in  $C_6H_6$  with alic. KOH (8-10%) in the absence of light and O does not alter the resistance to storage of the substances after extended periods even at elevated temp. The changes which take place consist of partial decomposition, forming colorless substances, as well as stereoisomerization. Under mild conditions the formation of di-cis isomers predominates: at first: neo- $\alpha$ -carotene B and neo- $\beta$ -carotene B, resp. At elevated temp. are also formed in smaller amts. neo- $\alpha$ -carotene U and neo- $\beta$ -carotene U (cf. Beadle, *et al.*, *C.A.* 36, 5856 and Zechmeister and Tuzson, *C.A.* 32, 9120<sup>1</sup>). G. M. Kosolapoff.

САВИНОВ Б.С.

*Bromination of carotene by N-bromosuccinimide.* B. G. Savinov and G. S. Tret'yakova. *Ukrain. Khim. Zh.* 1957, 32, 1051 (in Russian).—Bromination of carotene with N-bromosuccinimide is accompanied by dimerization. For the isolation of pure mono-Br dimer, which is not eluted in usual chromatographic methods, a water-sol. adsorbent (MgSO<sub>4</sub>) was used. The product, m. 110-20°, obtained from MgSO<sub>4</sub> contains inorg. matter. After crystn. from CHCl<sub>3</sub> the pure substance is obtained as a green-yellow powder, shrinking at 175-80°, decomp. at higher temps. It is sparingly sol. except in CHCl<sub>3</sub>; shows absorption max. at 424 mμ, and is a dimeric mono-Br deriv., with mol. wt. 1080-2000, contg. 8.5% Br. It is strongly adsorbed on Al<sub>2</sub>O<sub>3</sub>, MgO, CaO, or CaCO<sub>3</sub> and cannot be eluted; it forms a yellow-brown zone at the top of the column. G. M. Kosolapov.

CA

Some simplified methods for determining carotene in green plants. B. G. Savinov and G. M. Lushchevskaya. *Doklady Akad. Nauk S.S.S.R.* 70, 103-4(1951)—The method proposed by Sapozhnikov (*C.A.* 43, 711c), if used without chromatographic adsorption, is inaccurate. A modified Popandulo method (*Vitamin Compn. of Feeds*, 1949) is satisfactory if used as follows: 1 g. sample is ground with quartz sand, with addn. of 5-10 g. dry  $\text{Na}_2\text{SO}_4$ , mixed with chromatographic adsorbent (5 g. of  $\text{MgO}$ ), re-ground, placed in a column with petr. ether, by using petr. ether for quant. transfer to the column, and washing with pure petr. ether. Use of  $\text{C}_6\text{H}_6$  speeds the operation. If the chromatographic treatment and a 10-15 min. grinding are used in the Sapozhnikov method, the results are substantially accurate. Several common plants were successfully analyzed by both procedures. G. M. K.

SAVINOV, B.G.; TRET'YAKOVA, G.S.

Polymerization of carotone during bromization. Doklady Akad. nauk  
SSSR 78 no.3:553-555 21 May 1951. (GLML 20:9)

1. Institute of Organic Chemistry of the Academy of Sciences  
Ukrainian SSR. 2. Presented by Academician A.I. Oparin 30 March  
1951.

DUBININ, M.M., akademik, otvetstvennyy redaktor; GAPON, Ye.N.; GAPON, T.B.;  
ZHYPAKHINA, Ye.S.; RACHINSKIY, V.V.; BELEN'KAYA, I.M.; SHUVAEVA, G.M.;  
ROGINSKIY, S.Z.; YANOVSKIY, N.I.; FUKS, N.A.; KISELEV, A.V.; NEYMARK, I.Ye.;  
SLINYAKOVA, I.B.; KHATSET, F.I.; LOSEV, I.P.; TROSTYANSKAYA, Ye.B.;  
TEVLINA, A.S.; DAVANKOV, A.B.; SALDADZE, K.M.; BRUMBERG, Ye.M.; ZHIDKOVA,  
Z.V.; VEDENEVA, N.Ye.; NAPOL'SKIY, S.A.; MIKHAYLOVA, Ye.A.; KAZANSKIY, B.A.;  
RYABCHIKOV, D.I.; SHEMYAKIN, F.M.; KRETOVICH, V.L.; BUNDEL', A.A.; SAVINOV,  
B.G.; VENDT, V.P.; EPSHTEYN, Ya.A.

[Research in the field of chromatography transactions of the All-Union  
Conference on Chromatography, November 21-24, 1950] Issledovaniia v oblasti  
khromatografii; trudy Vsesoiuznogo soveshchaniia po khromatografii, 21-24  
noiabria 1950 g. Moskva, Izd-vo Akademii nauk SSSR, 1952. 225 p.

(MLRA 6:5)

1. Akademiya nauk SSSR. Otdelenie khimicheskikh nauk.

(Chromatographic analysis)

SAVINOV, B.G.

Chemical Abst.  
Vol. 48 No. 8  
Apr. 25, 1954  
Pharmaceuticals, Cosmetics, and  
Perfumes

Chromatographic separation of some lipoidal components of plant extracts on natural adsorbents. B.G. Savinov and A.A. Svishchuk. *Ukrain. Khim. Zhur.* 1953, 10, 1059-1060. Native diatomite (activated by 2-hr. treatment with 2N HCl) can provide a satisfactory chromatographic sepn. of chlorophyll, carotene, pigments, and tocopherols from plant exts. The adsorbent is best washed with H<sub>2</sub>O, EtOH, and CCl<sub>4</sub>, then dried just before use. Carotenoids are also well retained by bentonite. G.M. Kozlovskii.



SAVINOV, B.G.

Chemical Abst.  
Vol. 48 No. 9  
May 10, 1954  
Biological Chemistry

(4)  
Determination of summary tocopherols (Vitamin E) in plant products. B. G. Savinov and G. M. Lashchevskaya. *Ukrain. Khim. Zhur.* 18, 510-8 (1952) (in Russian); cf. *C.A.* 48, 3131b. —To det. the total content of tocopherols in plant material it is recommended that the method based on color reaction of 2,2'-dipyridyl with FeCl<sub>3</sub> be used; the tocopherols reduce FeCl<sub>3</sub> and color is obtained of the dipyridyl complex which can be used colorimetrically. However, for dependable results interfering plant substances should be removed. For this purpose the ext. is passed over a diatomaceous earth chromatographic column with CCl<sub>4</sub> as the solvent. The filtrate, which should be colorless, is then used for the reaction with FeCl<sub>3</sub> and dipyridyl after evapn. *in vacuo* in inert atm. The nitrate method of Furter and Meyer (*C.A.* 33, 4812<sup>g</sup>) often gives results that are too high. The present method was tested on numerous exts. with consistent results. The nitrate method is improved somewhat by the chromatographic pretreatment.  
G. M. Kosolapoff

SAYINOV B.G.

✓ Enriching of the coagula of green plants with vitamin E.  
D. A. Verner and B. G. Sayinov (Inst. Org. Chem., Acad.  
Sci. Ukr. S.S.R., Kiev). *Vitaminy, Akad. Nauk Ukr.*  
S.S.R. 1953, 78-81. — Protein coagula, prepd. from the juice  
of green alfalfa, contained originally dry substance 24.0-  
27.0%, tocopherols (I) 02.3-76.8 mg.%, carotene (II) 16.4-  
17.8 mg.%, and total N 3.43-3.81%. On acid hydrolysis  
(20 g. coagulum, 40 ml. 5% HCl soln., temp. 100°, time  
1-1½ hrs.) I and II are liberated from the protein, giving  
vitamin-enriched preps. in which the amts. of I and II can  
be 10-11 and 5-6 times as great as in the original protein  
preps., resp.; however, the abs. amt. of II decreases by  
20-1%. The protein hydrolysis can be made also in a 10%  
NaOH soln., but in the alk. medium a great destruction of  
I and II occurs. E. Wierbicki

my 2

SAVINOY, D. G.

Methods of determination of carotene and vitamin E in plants. G. M. Lushcheykaya and B. G. Savinoy. *Vitaminy, Akad. Nauk Ukr. S.S.R.* 1, 30 (1954). *Zhur., Khim.* 1954, No. 12839.—Two variations of a method for detg. carotene in plants differing in details of operation and including chromatographic purification of carotene exts. on MgO prior to colorimetric detn. are described. Detn. of vitamin E is based on an oxidimetric method with 1,1'-dipyridyl and FeCl<sub>3</sub>. This method is improved by including chromatographic purification of the ext. on diatomite. M. Hosen

SAVINOV, B.G.

A. Carotens in green parts of some wild plants of the Ukrainian S.S.R. G. M. Iushchevskaya and B. G. Savinov. *Vitaminy, Aend. Nauk Ukr. S.S.R.* 1, 136-8 (1956). *Zhur. Khim.*, 1954, No. 12960. The carotene content was studied in 210 specimens of wild growing grasses, bushes, and trees. Ninety of the studied specimens contained over 12 mg. % of carotene (12.1-30.0 mg. % fresh wt.). Max. accumulation of carotene in leaves occurs from the beginning of July to the middle of August. The ratio of carotene and carotenoids studied in 11 specimens varied within wide limits. In 4 specimens were found more carotenoids (10.3-40.6 mg. % fresh wt.) than carotene (14.1-16.9 mg. %). In the remaining specimens carotene was somewhat higher, 15.2-24.4 mg. %, than carotenoids, 12.0-22.9 mg. %. The ratio of the various fractions of carotenoids was studied chromatographically. The total quantity of carotenoids did not change during July-August, it attained a max. in October, and then started a sharp drop. The decompn. products of the carotenoids are primarily localized in the first zone of the chromatogram while the second zone does not change. It is quite possible that in the second zone are oxidation products of carotene. The pigments in the first zone are most likely independent, natural substances accompanying carotene. The basic pigment of the first zone was obtained in cryst. form and was identified as violaxanthin. The contents of carotene in green leaves of several plants dropped sharply upon storage of leaves for 10 days or when they were dried for 3 hrs. at 100°. M. Hosh

SAVINOV P G  
USSR.

Halogen derivatives of carotene. B. G. Savinov and G. S. Tret'yakov. Vitaminy, Akad. Nauk Ukr. S.S.R. 1, 137-141 (1955); Referat. Zhur., Khim. 1954, No. 10613.

Carotene (95% pure) was iodinated in the cold by stirring with iodine for 10 min., and recrystg. from  $\text{CHCl}_3$ . At a ratio for carotene-iodine mixt. of 1:1-1:6 the product contained 45-49-50.5% iodine which indicates a mixt. of substances. The melting temps. of the iodination product (I) varied from 137 to 178° (decompn.). Further study of I was done chromatographically using various adsorbents. The best proved to be anhyd. activated  $\text{MgSO}_4$ . The upper zone of the adsorbent which retained the basic I was colored green and could not be washed out completely. It was recovered by dissolving the adsorbent in water. I was extractable by  $\text{CHCl}_3$  and pptd. by benzine. Thus were aspd. tetraiodide, a black powder with metallic sheen, m. 177-180° (decompn.) and diiodide, a black powder m. 167-69° (decompn.). The yield of tetraiodide was approx. 20% and of the diiodide 4-5%. The iodine is thought to attach itself to the double bond of one or both  $\beta$ -ionone rings of carotene. N-Bromosuccinimide (1 mole) in  $\text{CCl}_4$  and 1.2 moles of carotene refluxed 1.5 hrs., filtered, and chromatographed on  $\text{MgSO}_4$  and the chromatogram treated in the same way as for the iodides gave a green-yellow powder of noncrystalline structure with no sharp m.p. Mol. wt. and Br data indicate that bromination is accompanied by dimerization which results in the

2/2 B. G. SAVINOV  
formation of a monobromo-substituted dimer of carotene  $C_{80}H_{111}Br$ . Bromination of carotene by dissolving it in Br and combining the reagent dissolved in  $CHCl_3$  gave the same results. Carotene bromide, m.  $157-8^\circ$ , corresponds to the formula  $C_{16}H_{21}Br_2$ , which indicates complete satn. of all the double bonds and substitution of 2 H atoms, apparently in the  $\alpha$ -methylene groups adjacent to the terminal double bonds of the conjugation system. Carotene bromide readily dissolved in  $CHCl_3$ ,  $CCl_4$ , and  $C_6H_6$ , dissolved slightly in  $Mg_2CO$ , EtOH, and benzene.

M. Rosen

GRINBERG, F.L., MIKHAYLOVNINA, A.A., SAVINOV, B.G., SVISHCHUK, A.A.,

Stability of carotene. Vitaminy no.1:149-157 '53 (MIRA 1116)

1. Institut organicheskoy khimii AN USSR, Kiyev.  
(CAROTENE)

SAVINOV, B. G.

"Delegates' Meeting of Ukrainian Republic Division of All-Union Chemical Society  
im. D. I. Mendeleev" (Ukrainskiy Khimicheskiy Zhurnal, Vol XIX, No. 3, pp.  
341-342, 1953)

The second delegates' meeting of the Ukr. Republic Div. of the All-Union Chemical  
Society im. D. I. Mendeleev was held at Kiev 28 March 1953. Present at this meeting  
were representatives of organizations of the society from various cities of the  
Ukrainian SSR. The delegates represented ten divisions (i.e., local sections)  
and comprised about 2,000 chemists, who were members of the Ukrainian Republic  
Division of the Mendeleev society. (Full translation ~~responsible~~  
*available*)

1. SAVINCV, B. G., MIKHAILOVICHINA, A. A.
2. USSR (600)
4. Carotene
7. Neo- $\beta$  -carotene B as a product of primary stereoisomeric conversion of  $\beta$ -carotene during heating, Dokl. AN SSSR 88, no. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

SAVINOV, B.G.

Major trends in research in organic chemistry in view of the resolutions of the 19th Congress of the Communist Party of the Soviet Union and of the September Plenary Session of the Central Committee of the Communist Party of the Soviet Union. Ukr.khim.zhur. 20 no.1:3-13 '54.

(MLBA 7:3)

(Chemistry, Organic)

SAVINOV, B.; SHILOV, Ye.

In the Council for the Ukrainian State and Kiev Departments of the  
Mendeleev All-Union Chemical Society. Ukr.khim.zhur. 20 no.3:340 '54.  
(Ukraine--Chemistry) (Chemistry--Ukraine) (MLRA 7:8)

SAVINOV, B. G.

USSR/Chemistry - Chromatography

Card : 1/1 Pub. 116 - 11/20

Authors : Savinov, B. G. and Protsenko, L. D.

Title : Chromatographic investigation of carotene dyes of squash, mountain ash and thistle.

Periodical : Ukr. khim. zhur. 20, Ed. 4, 399 - 407, 1954

Abstract : The content and chemical nature of carotene dyes, found in certain chlorophyll-free organs of plants, were investigated by the chromatographic method. The results are presented in tables. Eighteen references: 5-Swiss, 7-German, 3-USSR, 2-Ukrainian and 1-English (1930-1953).

Institution : Acad. of Sc. Ukr-SSR, Institute of Organic Chemistry

Submitted : February 20, 1954

SAVINOV, B. B.

V 1633. Determination of vitamin E (total natural tocopherols) in vegetable oils. B. G. Savinov, G. M. Lushchevskaya and L. A. Musilko. *Ukr. Khim. Zh.*, 1954, 20 (5), 573-577.—A solution of 1 g of the oil and 0.1 g of pyrogallol in 4 ml of methanol is heated under reflux in a stream of inert gas, and 1 ml of 60 per cent. aq. KOH is added. Boiling is continued for 5 to 7 min., and the mixture is cooled, diluted with 40 ml of H<sub>2</sub>O, and extracted with ether (3 x 15 ml). The extract is washed with H<sub>2</sub>O and 5 per cent. aq. KOH, and with H<sub>2</sub>O (the washings are tested for pyrogallol and alkali). It is then dried by filtration through Na<sub>2</sub>SO<sub>4</sub>, the ether is distilled off, and the residue is dissolved in 5 ml of benzene. The benzene solution is further purified by filtration through diatomite in a 16-cm x 1-cm column (diatomite layer 1 cm thick, with a little Na<sub>2</sub>SO<sub>4</sub> above). A filter-pump is used to draw the solution through the column, which is washed down with 25 ml of pure benzene (testing for complete extraction of tocopherols by FeCl<sub>3</sub> and 2:2'-dipyridyl). The benzene is distilled off *in vacuo*. The residue is dissolved in abs. ethanol and the solution is made up to 25 ml. A measured quantity of this solution (≈ 0.15 to 0.35 mg of tocopherols) is treated with 1 ml of 0.2 per cent. FeCl<sub>3</sub> soln. and 1 ml of 0.5 per cent. 2:2'-dipyridyl (both in abs. ethanol). The colour is measured in a photometer (green filter) and the tocopherol estimated from a calibration curve. Results are more reliable than those obtained by the HNO<sub>3</sub> method, which is affected by the presence of tocopherol-quinones.

F. W. KIRKBRIDE

SAVINOV, B. G.

✓ Use of adsorption chromatography for analysis of carotene pigments and their stereoisomers. B. G. Savinov. *Trudy Komisii Anal. Khim., Akad. Nauk S.S.S.R., Inst. Geokhimi. Anal. Khim.*, 6, 122-36 (1955).—The carotene pigments of the fruits of *Cucurbita*, *Sorbus aucuparia*, *Hippophae rhamnoides*, *Rosa canina*, and *R. corymbifera* were studied. The sepn. of carotene stereoisomers was described. For *Cucurbita*  $Al_2O_3$  (1.25%  $H_2O$ ) was the adsorbent, petr. ether (b.p. 40-90°) the solvent, and  $C_6H_6$  (or  $C_4H_8$ ) with petr. ether) the wash liquid. The liquid for discharging was petr. ether contg. 1-5% EtOH or MeOH. The 6 adsorption zones, in descending order, were: violaxanthin ( $C_{40}H_{56}O_2$ ) or its isomer taraxanthin, flavoxanthin ( $C_{40}H_{56}O_2$ ), chrysanthemaxanthin, an unknown oxidation product, xanthophyll,  $\beta$ -carotene, and  $\gamma$ -carotene. These comps. were identified by the max. of absorption (in the visible spectra) of their solns. *S. aucuparia* gave 4 adsorption

zones when  $Al_2O_3$  activated at 200° was the adsorbent, and  $C_6H_6$  the wash liquid. Solns. of the sepd. zones were tested by spectrophotometry and also by chromatography of a mixt. of the unknown with a known compd. In descending order the zones were: an unknown carotenoid (not crocetin), cryptoxanthin ( $C_{40}H_{56}O_2$ ),  $\beta$ -carotene monoepoxide, and  $\beta$ -carotene.  $\beta$ -Carotene was 30% of the extd. pigments. The fat fraction of the juice of the berry of *H. rhamnoides* was sapond. The unsapond. pigment partly dissolved in petr. ether. When the sola. was passed through  $Ca(OH)_2$  activated at 500°, 7 zones sepd.: unknown, zeaxanthin ( $C_{40}H_{56}(OH)_2$ ), unknown (but a pigment in tomatoes), lycopene, unknown,  $\gamma$ -carotene, and  $\beta$ -carotene. Carotenes,  $\beta$  and  $\gamma$ , were 20% of the extd. pigments. Similarly, in the fruit of *R. corymbifera* was found ribixanthin ( $C_{40}H_{56}(OH)_2$ ), lycopene, and  $\gamma$ - and  $\beta$ -carotene. The last 3 comps. were 4% of the extd. pigments. For sepn. of carotene stereoisomers, their  $C_6H_6$ -petr. ether (1:3) soln. was passed through  $Al_2O_3$  activated 2 hrs. at 700°. This sepd. isomers adsorbed below the *trans*-carotene zone. The *trans*-carotene zone (and higher zones) were washed with  $C_6H_6$ -alc. soln. after alc. and  $H_2O$  were removed the filtrate was passed through  $Ca(OH)_2$  activated  $\frac{1}{2}$  hr. at 500°. This sepd. stereoisomers adsorbed above *trans*-carotene. Neo- $\beta$ -carotene B was sepd. in crystals and characterized. E. M.

SAVINOY, B.G. SVISHCHUK, A.A.

Crystallization of carotene. Vitaminy no.2:17-21 '56. (MIRA 10:8)

1. Institut organicheskoy khimii Akademii nauk USSR, Kiev  
(CAROTENE) (CRYSTALLIZATION)

SAVINOV, B.G.; SVISHCHUK, A.A.

Obtaining superstaturated preparations of carotene. Vitaminy no.2:  
22-24 '56. (MLRA 10:8)

1. Institut organicheskoy khimii Akademii nauk USSR, Kiyev  
(CAROTENE) (SOLUTIONS, SUPERSATURATED)

SAVINOV, B.G.

1702. The use of adsorption chromatography in the analysis of carotene pigments and their stereoisomers. B. G. Savinov. *Trudy Komiss. Anal. Khim. Akad. Nauk SSSR*, 1956, 6, 122-139. *Ref. Zhur. Khim.*, 1956, Abstr. No. 36,115. A method is described for the stepwise chromatographic separation of a mixture of the natural isomers of carotene and its products (the carotenoids) in extracts from various plant materials. In the first stage (the separation of the carotenes from chlorophyll and the carotenoids) the use of MgO as adsorbent at a moisture content of 0.6% and the

washing of the chromatogram with pure benzene are recommended. The carotenes pass through the column, while the other components are strongly adsorbed. The separation of the isomers of carotene is carried out on the same adsorbent, but the column is washed with light petroleum (boiling up to 80°). A fine separation of all the carotene pigments is achieved only after careful establishment of the analytical conditions in each case. Examples are given of such a separation and of the identification of the components in various products of plant origin. As well as Al<sub>2</sub>O<sub>3</sub> and the oxides and carbonates of the alkaline-earth metals, bentonitic clays and diatomite are used as adsorbents.

C. D. KOPKIN

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 84-2

Author: Savinov, B. G., Verner, D. A., and Mikaylovnina, A. A.

Institution: None

Title: On the Monomethylation of Xylene

Original  
Periodical: Ukr. khim. zh., 1956, Vol 22, No 1, 84-87

Abstract: The conditions for the preparation of pseudocumene (I) from xylene (II) have been investigated. The methylation of II with  $\text{CH}_3\text{Cl}$  for 12-25 hours in the presence of anhydrous  $\text{Al}_2\text{Cl}_3$  at  $80^\circ$  gives I in yields of 30-38% (based on II charged). The separate methylation of the isomers of II produces no advantage compared to the methylation of the mixture; I and mesitylene are formed in both cases. Mesitylene and II are obtained by the hydrolysis with 20%  $\text{HCl}$  (30 minutes) followed by steam-distillation for 90 minutes at  $80-90^\circ$ , of the sulfonic acids formed when the fraction of alkylated products boiling at  $150-180^\circ$  is sulfonated with an equal volume of concentrated  $\text{H}_2\text{SO}_4$ .

Card 1/2

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, #42

Abstract: at 80°. From the remaining pseudocumenesulfonic acid I is separated by hydrolysis with concentrated H<sub>2</sub>SO<sub>4</sub>.

Card 2/2

SAVINOV, B.G.

✓ Titrimetric methods for determination of tocopherols.  
G. M. Lushcheykaya and B. G. Savinov (Inst. Org. Chem.  
Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Khim. Zhur.* 22,  
236-8 (1958) (in Russian). — Four methods were compared:  
iodometric (oxidation with  $Pb(CH_3COO)_2$  and with  $FeCl_3$ ),  
cerimetric, ferrodipyriddy, and  $HNO_3$ . Of these the pre-  
ferred procedure was the iodometric one. The draw-  
back is that the method requires comparatively large samples  
(10-30 mg.). M. Hosh

Handwritten initials and a checkmark.

Handwritten initials "EM" and a checkmark.

SVISHCHUK, A.A.; SAVINOV, B.G.

Preparation of phytol from the chlorophyll of plants. Ukr.khim.  
zhur. 22 no.4:518-522 '56. (MIRA 10:10)

1. Institut organicheskoy khimii AN USSR.  
(Phytol) (Chlorophyll)

~~SECRET~~  
VYVAL'KO, I.G.; DUSHECHKIN, A.I. [deceased]; LUSHCHEVSKAYA, G.M.; MATKOVSKIY,  
K.I.; SAVINOV, B.G.; SHILOV, Ye.A.; YASNIKOV, A.A.

Mechanism of the biosynthesis of isoprene compounds. Part 2. Formation  
of carotene pigments in the leaves of kok-saghyz. Ukr. khim. zhur. 22  
no.5:655-659 '56. (MIRA 10:6)

1. Institut organicheskoy khimii Akademii nauk USSR i Institut fizio-  
logii rasteniy i agrokhimii Akademii nauk USSR.  
(Carotene) (Kok-saghyz) (Biosynthesis)

SAVINOV, B. G.

... method described herein for determining the quality of  
phytol; B. G. Savinov; A. P. Kabanov; A. A. Sviridov  
and C. ... *Dokl. Akad. Nauk. SSSR*, 24, 790-900

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SHINCU, B.G.

ПРИКОТ'КО, А.Ф.

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L'vov. Universytet

Materialy I Vsesoyuznogo soveshchaniya po spektroskopii. t. 1: Molekulyarnaya spektroskopiya (Papers of the 10th All-Union Conference on Spectroscopy. vol. 1: Molecular Spectroscopy) [L'vov] Izd-vo L'vovskogo univ-ta, 1957. 499 p. 4,000 copies printed. (Series: Ita: Fizichnyy zbirnyk, VYP. 3/8/)

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii. Ed.: Jazer, S.L.; Tech. Ed.: Saranyuk, T.V.; Editorial Board: Laidberg, G.S., Academician (Resp. Ed., Deceased), Noporent, B.S., Doctor of Physical and Mathematical Sciences, Fabelinskiy, I.L., Doctor of Physical and Mathematical Sciences, Fabelinskiy, V.A., Doctor of Physical and Mathematical Sciences, Kornitskiy, V.G., Candidate of Technical Sciences, Rayskiy, S.M., Candidate of Physical and Mathematical Sciences, Klimovskiy, L.K., Candidate of Physical and Mathematical Sciences, Miliyanchuk, V.S., A. Ye., Candidate of Physical and Mathematical Sciences.

Card 1/30

Savinov, B.G. Use of Infrared Absorption Spectra in Determining the Characteristics of the Products of Vitamin E Synthesis 265

Belyy, M.U. Optical Method for the Determination of the Composition of Complexes in Solutions 267

Bogomolov, S.G., M.P. Grebenshchikova, and I. Ya. Lipavk. Analysis of Phenol-naphthalene Mixtures by Means of Ultraviolet Absorption Spectra 270

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Noporent, B.S., K.F. Vasilevskiy, and N.A. Lapina. Qualitative Absorption by Means of Water Vapor in Near Infrared Region

Card 18A

SAVINOV, B. G.

AUTHOR: Savinov, B. G.

73-1-24/26

TITLE: Second Rubezhnoye Session of the Division of Chemical and Geological Sciences of the Academy of Sciences of the Ukrainian SSR. (2-ya Rubezhanskaya sessiya Otdeleniya khimicheskikh i geologicheskikh nauk Akademii Nauk Ukr. SSR)

PERIODICAL: Ukrainskiy Khimicheskii Zhurnal, 1957, Vol.23, No.1, pp.128-129 (USSR)

ABSTRACT: The meeting was held from October 22 to 24, 1956 at the Rubezhnoye Chemical Combine (Rubezhnoye Khimicheskii Kombinat). Delegates of three chemical institutes (organic, physical and general, inorganic chemistry) of the Academy of Sciences, Ukraine, participated and also delegates from the Rubezhnoye Chemical Combine and the Rubezhnoye Branch of the Research Institute for semi-finished products and dyes (NIOPIK) and chemists from various parts of the Ukraine. The president of the Chemistry and Geology Section of the Ac.Sc. Ukraine, A. I. Kiprianov, mentioned in his opening address that during the five years which had passed since the first Rubezhnoye sectional meeting, the chemical institutes of the Ac.Sc. Ukraine had associated with the work of the Rubezhnoye Combine and were concerned to a greater or

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Second Rubezhnoye Session of the Division of Chemical and Geological Sciences of the Academy of Sciences of the Ukrainian SSR.

lesser extent with problems of interest to the individual undertakings of this combine. As a result of this teamwork, various problems were solved which were of interest to the Rubezhnoye Combine, particularly perfection of a catalyst for the synthesis of phthalic anhydride from naphthalene and a method of purifying the industrial effluents of the combine. The director of the combine, S. D. Bushnev, reported on the prospects of further development of the combine. The production schedule includes organic dyes of every class and also organic and inorganic semi-finished products, poisoned chemicals for agriculture, etc. However, the diversity of the manufactured dyes is not large enough. It is scheduled to introduce in the near future new equipment for manufacturing dyes. Mastering by the combine of new types of production techniques requires solution in time of certain technical and chemical problems. He outlined certain concrete problems which could be solved with the participation of the chemists of the individual institutes of the Ukrainian Ac.Sc. Work on perfecting the catalytic oxidation of naphthalene was reported in two papers. The

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kinetics and macro-kinetics of catalytic oxidation of naphthalene was reported by G. P. Korneychuk, a member of a team of the Institute of Physical Chemistry, Ac.Sc., Ukraine (comprising V. A. Royter, Ya. V. Zhigaylo, V. P. Ushakova). Theoretical consideration of the problem led to the conclusion that it is advisable to use molten vanadium pentoxide which permits increasing appreciably the yield in phthalic anhydride. V. Ya. Vol'fson and Z. A. Lyubitelev (Central Works Laboratory) described the results of investigation of this method in practice and of introducing it into production. A.M. Koganovskiy, IONKh AN USSR, V. M. Chertov, Institute of Gas Utilisation Ac.Sc. Ukraine (Institut Ispol'zovaniya gaza AN USSR and R. M. Bekher, NIOPIK, reported on the work relating to purification of the waste waters. Purification of the effluents into the Donets River is a very serious problem. The work carried out by the chemists of the Ac.Sc. Ukraine, together with the NIOPIK Branch, the team of the combine and the project organisations led to developing a scheme of purification structures based on the separating out by chemical methods and subsequent treatment with active carbon

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Second Rubezhnoye Session of the Division of Chemical and Geological Sciences of the Academy of Sciences of the Ukrainian SSR.

of the effluents. A method was developed of producing and activation of carbon from a very accessible raw material, namely, anthracite. The meeting has expressed a desire for more rapid introduction of this method for purifying the effluents from the combine which would result in considerable economies and permit the combine to extent its production without danger of fouling nearby water reservoirs. G. M. Oksengendler reported on the work of NIOPIK on perfecting the production of the Rubezhnoye Chemical Combine; S. T. Rashevskaya, scientific head of the works' laboratory, reported on utilisation of raw materials and on improving the quality of semi-finished products and dyes. In these papers a review was given of the work of the scientific teams and chemists of the central and works' laboratories and of innovators relating to a further rise of the technical standard of the works and certain problems were mentioned, for the solution of which it is desirable to have the assistance of the scientists of the Ac.Sc. Ukraine. In addition to the papers relating to production, members of the section of chemistry and geology read papers on general and theoretical

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73-1-24/26

Second Rubezhnoye Session of the Division of Chemical and Geological Sciences of the Academy of Sciences of the Ukrainian SSR.

topics. Academician A. I. Brodskiy reported on the work of the Institute of Physical Chemistry (Institut Fizicheskoy Khimii) relating to the study of compounds of sulphur and nitrogen by isotope methods which aroused the interest of the personnel of the Central Laboratory of the Rubezhnoye Combine who intend to introduce the isotope method in their investigations. Academician A.I.Kiprianov considered the dependence of the coloration of organic compounds on their spatial structure. He showed that disturbance of the coplanarity leads to a reduction in the degree of coupling of binary bonds, which in some cases leads to a lightening and in others to a darkening of the colour. Academician Ye. A. Shilov considered the structural and energy conditions of formation of transient complexes in organic reactions and pointed out the importance and the extent of occurrence of donor-acceptor systems. Professor V. A. Royter gave a review of modern trends in the theory of heterogeneous catalysts which is of great interest for correct organisation of chemical processes at the combine. The participants of the meeting acquainted themselves with the shops of the combine, organised meetings

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with engineering personnel, foremen and innovators and they also inspected the neighbouring Lisichan Chemical Combine. As a result of direct meetings between the production personnel and the scientists common interests were revealed which will ensure co-operation between the Kiev and the Rubezhnoye chemists.

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Card 6/6



SHNAYDMAN, Lev Osipovich; SAVINOV, B.G., doktor tekhn.nauk, rezensent;  
LEBEDEV, A.D., inzh., rezensent; BELIKOVA, L.S., red.; SOKOLOVA,  
L.A., tekhn.red.

[Production of vitamins] Proizvodstvo vitaminov. Moskva,  
Pishchepromizdat, 1958. 413 p. (MIRA 12:2)  
(Vitamins)

ROMINSKIY, Ivan Rodionovich [Romyns'kyi, I.R.]; SAVINOV, Boris Gri-  
gorovich [Savinov, B.H.], doktor tekhn.nauk, otv.red.;  
POKROVS'KA, Z.S., red.izd-va; KADASHVICH, O.O., tekhn.red.

[Fructose and inulin] Fruktosa ta inulin. Kyiv, Vyd-vo Akad.  
nauk URSR, 1959. 148 p. (MIRA 13:3)  
(Fructose) (Inulin)

VYVAL'KO, I.G.; DUSHECHKIN, A.I. [deceased]; LUSHCHEVSKAYA, G.M.; MATKOVSKIY, K.I.;  
SAVINOV, B.G.; SHILOV, Ye.A.; YASNIKOV, A.A.

Biosynthesis of carotene. Vitaminy no.4:159-163 '59.  
(MIRA 12:9)

1. Institut organicheskoy khimii Akademii nauk USSR i Institut  
zemledliya Ministerstva sel'skogo khozyaystva USSR, Kiyev.  
(CAROTENE)

SAVINOV, B.H.[Savinov, B.H.], doktor tekhn.nauk, prof.

Presents from the great chemical industry. Znan.ta pratsia  
no.6:18-20 Je '59. (MIRA 12:11)  
(Synthetic products) (Polymers)

SAVINOV, B.G. [Savinov, B.H.], prof., doktor tekhn.nauk

Tons of meat from milligrams of powder. Znan. ta pratsia no.5:10-12  
My '60. (MIRA 13:10)

(Growth promoting substances)

30749

Z/011/61/018/012/003/007  
E073/E535

11.0910

AUTHORS: Savinov, B.G. and Klimenko, P.L.

TITLE: Study of the stability to thermal oxidation of the oil AMG-10 by means of infrared spectroscopy

PERIODICAL: Chemie a chemická technologie; Přehled technické a hospodářské literatury, v.18, no.12, 1961, 560, abstract Ch61-7747 (Khimiya i tekhnologiya topliv i masel, no.5, 1961, 60-63)

TEXT: The infrared absorption spectrum of the hydraulic fluid AMG-10 changes considerably as a result of oxidation by air at 200°C. The location of the absorption bands is given, these correspond to the formation of carbonyl compounds, esterification and the formation of oxidation products of the OH group. 3 figures, 4 references.

[Abstractor's note: Complete translation.]

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S/080/62/035/002/016/022  
D258/D302

AUTHORS: Savinov, B. G., Chertkov, Ya. B. and Klimenko, P. L.

TITLE: Study of the structure of nitrogen and oxygen-containing compounds in ligroin-kerosene petroleum fractions by the method of infra-red spectra

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 2, 1962, 398-404

TEXT: The authors' aim was to study the little known structures of N- and O-containing constituents present in both straight distillates and cracking products of petroleum fuels. This was done in view of the relative ease of isolation and the possible economic value of these compounds. Kerosene fractions of T-1 and TC-1 (T-1 and TS-1) fuels and cracking products of both high and low S-contents were passed through activated silica gel columns and the residual non-hydrocarbons were first eluted with alcohol benzene, then freed of S compounds and finally purified on activated alumina. A comparison of the infra-red spectra showed the presence of aromatic and heterocyclic structures in all samples. Oxygen was

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Study of the structure ...

S/080/62/035/002/016/022  
D258/D302

shown to be present in the form of OH and C = O groups. There are  
2 figures, 2 tables and 5 Soviet-bloc references.

SUBMITTED: February 23, 1961

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SAVINOV, B.G.; CHERTKOV, Ya.B.; KLIMENKO, P.J.

Structure of oxygen and nitrogen compounds of ligroine-kerosine  
petroleum fractions studied by infrared spectroscopy. Zhur. prikl.  
khim. 35 no.2:398-404 F '62. (MIRA 15:2)  
(Petroleum products--Spectra)

SAVITSKY, S. I.

SAVITSKY, S. I.: "Soils of the western portion of the delta of the Terek River." Moscow Order of Lenin Agricultural Academy, Irani K. A. Timiryazev. Moscow, 1956. (Dissertation for the Degree of Candidate in Agricultural Sciences).

SO: Kulshraya Estoris' No. 22, 1956

USSR/Soil Science - Tillage. Melioration. Erosion.

J-4

Abs Jour : Ref Zhur - Biol., No 5, 1958, 20083

Author : ~~Savinov, B.I.~~

Inst : -

Title : The Change in the Salt Structure of Meadow Solonchak and Solonchak Soils of Kizlyarskiy Rayon in Groznenskaya Oblast' during Irrigation.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1956, 1, No 26, 108-112.

Abstract : Washing off with estuary flooding without a fault system layout has been widely distributed in the rayon where the investigations were made and is characterized by the intermittent and low effect of desalting: after the watering in spring at a rate of 2500 cubic meters per hectare, in the fall the total salt content in the top horizon of salt meadow soil was 88% that of before watering. It is recommended in the case where the ground water is

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USSR/Soil Science - Tillage. Melioration. Erosion.

J-4

Abs Jour : Ref Zhur - Biol., No 5, 1958, 20083

set higher than 100 cm that the wash watering be applied  
after the run-off of the ground water and its fixing at a  
depth of not less than 150 cm.

Card 2/2

- 18 -



SAVINOV, G. B.

Chem Abs  
V. 48 25 Jan 54

Organic Chem

Synthesis of compounds possessing vitamin A activity.  
B. G. Savinov and G. S. Tref'yanova. *Uspekhi Khim.* 20,  
336-60 (1951).—Review with 70 references. G. M. K.

3  
②  
C. Kern

PK

*SAVINOV, B. G.*

USSR/Chemistry - Vegetable coloring

Card 1/1 Pub. 77 - 6/20

Authors : Savinov, B. G., Dr. Tech. Sci., Prof.

Title : Carotene

Periodical : Nauka i zhizn' 21/12, 15-16, Dec 1954

Abstract : The substance carotene is described with particular regard to its use as a vegetable coloring and as a source of vitamin A. Figures are given of the carotene content of various vegetables, showing the carrot to have the highest percentage. An older method of extracting carotene is described, its defects are pointed out and an account is given of a new and more effective method developed by the Institute of Organic Chemistry. An increase in the production of carotene in the Soviet Union of 2 1/2 times during the last five years is claimed. Illustrations.

Institution : ...

Submitted : ...

BORISENOK, I.T.; GENEROZOV, M.N.; YEREMEYEV, N.V.; KARAMYSHKIN,  
V.V.; KUZOVKOV, N.T.; BORISENOK, I.T.; KULIKOVSKAYA, N.V.;  
SAVINOV, G.I., kand.fiz.-mat. nauk, dots. [deceased];  
PIROCOV, I.Z.; Prinimali uchastiye: BALAYEVA, I.A.; BALAKIN,  
B.M.; BELYAYEVA, G.M.; BELYAKOV, V.I.; VELERSHTEYN, R.A.;  
ZHARKOV, G.M.; KOROLEVA, V.Ye.; LITVIN-SEDOY, M.Z.; POPOV,  
A.I.; PRIVALOV, V.A.; STUKALOVA, L.M.; CHISTYAKOV, A.I.;  
SAVVIN, A.B., red.; CHISTYAKOVA, K.S., tekhn. red.

[Laboratory work in theoretical and applied mechanics] Labo-  
ratornyi praktikum po obshchei i prikladnoi mekhanike. Mo-  
skva, Izd-vo mosk. univ. 1963. 233 p. (MIRA 16:12)

1. Kafedra prikladnoy mekhaniki Moskovskogo gosudarstvennogo  
universiteta (for Balayeva, Balakin, Belyayeva, Belyakov,  
Velershteyn, Zharkov, Koroleva, Litvin-Sedoy, Popov, Privalov,  
Stukalova, Chistyakov).  
(Mechanics--Laboratory manuals)

AVRAMENKO, L. I.; KOLESNIKOVA, R. V.; SAVINOVA, G. I.

Rate constants and mechanism of reactions of oxygen atoms with ethylene, propylene, and isobutylene. Izv. AN SSSR. Otd. khim. nauk no.1:36-45 '63. (MIRA 16:1)

1. Institut khimicheskoy fiziki AN SSSR.

(Oxygen) (Chemical reaction, Rate of)  
(Olefins)

AVRAMENKO, L.I.; KOLESNIKOVA, R.V.; SAVINOVA, G.I.

Mechanism and rate constant of the reaction between oxygen atoms  
and acetylene. Izv. AN SSSR. Ser. khim. no.3:408-412 '65. (MIRA 18:5)

I. institut khimicheskoy fiziki AN SSSR.

NAVAGIN, Yuriy Sergeevich, kand. tekhn. nauk; SAVINOV, G.S., red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Using the energy from underwater blasting for sheet stamping (drawing)] Ispol'zovanie energii podvodnogo vzryva dlia listovoi shtampovki (vytiazhki); stenogramma leksii, pročitannoi v LDNTP na zaniatii seminaru ob kholodnoi shtampovke. Leningrad, 1961. 28 p. (MIRA 14:7)

(Sheet metal work)

SAVINOV, G.S.; RUBTSOVA, N.M.; MOSKVIN, D.S., inzh., retsenzent

[The EV-80-3 electronic computer and its use in planning and accounting work] Elektronnyi vychislitel' EV-80-3 i ego ispol'zovanie v planovye-uchetnykh rabotakh. Moskva, Mashinostroenie, 1965. 106 p. (MIRA 18:8)

SAVINOV, Gleb Stepanovich; RUBTSOVA, Nina Mikhaylovna; NOVIKOVA,  
L.K., red.

[Some problems in designing and organizing computer centers  
of enterprises] Nekotorye voprosy proektirovaniia i organi-  
zatsii vychislitel'nykh tsentrov predpriatii. Leningrad,  
1965. 35 p. (MIRA 18:11)

ZHIGUNOVA, N.I.; SAVINOV, G.S., inzh., red.; FREGER, D.P., red. ind-va;  
GVIRTS, V.L., tekhn., red.

[Using explosive energy in the manufacture of machinery;  
bibliographical index of literature] Primenenie energii  
vzryva v mashinostroitel'nom proizvodstve: bibliograficheski  
ukazatel' literatury. Pod red. G.S. Savinova. Leningrad, 1961.  
(MIRA 14:12)  
31 p.

1. Leningradskiy Dom nauchno-tekhnicheskoy propagandy. Nauchno-  
tekhnicheskaya biblioteka.

(Bibliography--Metalwork)  
(Bibliography--Explosives)